Final Environmental Assessment
Lewis County Fire District #13
Replacement of Fire Station #1 (Main Station)
Lewis County, Washington
FEMA-1734-DR-WA (Public Assistance)

July 2012

FEMA

U.S. Department of Homeland Security
Federal Emergency Management Agency – Region 10
130 228th Street Southwest
Bothell, Washington 98201-9796

Photo: Existing Station #1 and Its New Location on the Left

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TERMS USED IN THIS DOCUMENT

Area of Potential Effects (APE) – the geographic area within which an undertaking may cause changes in the character or use of historic properties, if such properties exist. The APE is influenced by the scale and nature of the undertaking.

Best Management Practices (BMPs) – environmental protection practices applied to help ensure that projects are conducted in an environmentally responsible manner.

Floodplain – the lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year.

Nonattainment Area – the geographic area designated by the US Environmental Protection Agency (EPA) at 40 Code of Federal Regulations (CFR) Part 81 as exceeding a National Ambient Air Quality Standard for a specific pollutant listed in the regulations.

Ordinary High Water Mark (OHWM) – That line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas [33 CFR 328.3(e)].

Prime Farmland – land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion, as determined by the US Secretary of Agriculture. Prime Farmland includes land that possesses the above characteristics but is being used currently to produce livestock feed, and timber. It does not include land already in or committed to urban development or water storage.

ACRONYMS USED IN THIS DOCUMENT

ACM – Asbestos Containing Material

CEQ – Council on Environmental Quality

CFR – Code of Federal Regulations

DAHP – (Washington State) Department of Archaeology and Historic Preservation

DFW – (Washington State) Department of Fish and Wildlife

DNR - (Washington State) Department of Natural Resources

EA – Environmental Assessment

Ecology – (Washington State) Department of Ecology

EIS – Environmental Impact Statement

EMD – (Washington State) Emergency Management Division

EMT – Emergency Medical Technician

EO – (Presidential) Executive Order

FPARS – Forest Practices Application Review System

FPPA – Farmland Protection Policy Act

FONSI – Finding of No Significant Impact

LBP – Lead Based Paint

LCFD #13 – Lewis County Fire District #13

NEPA – National Environmental Policy Act

NHPA – National Historic Preservation Act

NRCS – (U.S. Department of Agriculture) Natural Resources Conservation Service

OHWM – Ordinary High Water Mark

SHPO – State Historic Preservation Office

SWCAA – Southwest Clean Air Agency

USFWS – US Fish & Wildlife Service

1.0 INTRODUCTION

The Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1973 (Stafford Act), as amended, provides federal assistance programs for both public and private losses sustained in presidentially declared disasters. Under the Stafford Act, the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) provides Public Assistance (emergency and infrastructure) funding to local and state public entities, and private non-profit (PNP) groups to restore damaged infrastructure. The Lewis County Fire District #13 (LCFD #13, or Fire District) applied, through the Washington State Emergency Management Division (EMD), to FEMA for partial funding to replace its main fire station, which was damaged by flooding. The LCFD#13 is an all-volunteer fire department and the fire station is unmanned. The existing fire station and new location on which the fire station would be constructed is in Lewis County, Washington, on property owned by the Fire District (See Figure 1, Project Vicinity Map. Figures are located at the end of this document.). The proposed new fire station location is approximately 14 miles south of Chehalis, Washington, in the community of Boistfort, at 997 Boistfort Road:

> Station #1 (Main Station); NW ¼ of Section 44, Township 12 North and Range 4 West, Willamette Meridian (Lat. 46.54866, Long. -123.13236).

The National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500 through 1508) direct FEMA and other federal agencies to take into consideration the environmental consequences of proposed federally funded projects. In accordance with these regulations, a Draft Environmental Assessment (EA) was prepared for the proposed action to provide sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI). Based on the analysis presented in and the lack of public and agency comments on the Draft EA, FEMA has determined that the project would not significantly affect the quality of the human environment and therefore FEMA has made a Finding of No Significant Impact.

The CEQ and FEMA regulations (44 CFR Part 10) that implement NEPA require NEPA documents to be concise, focus on the issues relevant to the project, and exclude extraneous background data and discussion of subjects that are not relevant or would duplicate analyses already provided to the public. Accordingly, the following subjects are not evaluated in detail in this EA for the following reasons:

Subject	Analysis
Air Quality	The project is not in a nonattainment area, and is located in an area that is sparsely developed. Construction would create dust and vehicle and equipment emissions; however, impacts would be temporary. The project replaces existing facilities and does not increase current operations that would emit air pollutants. However, demolition of the existing Fire Station may require management of asbestos containing material (ACM), which if not managed in accordance with applicable regulations, could affect air quality. This potential is addressed in Section 4.2, Hazardous Materials and Toxic Wastes.
Farmland Protection Policy Act (FPPA)	The project location has soils that are classified as "Prime Farmland" according to the Natural Resources Conservation Service (NRCS) Lewis County soil survey map. However, the Station #1 site has already been established for fire station use and is not considered farmland (NRCS 2011).
Geology and Soils	Soils at the site are Alvor Silty Clay Loam, and Chehalis Silty Clay in the area of Station #1. A test pit dug by Environmental Design, LLC, indicates that the soil appears to be more consistent with the Cloquato Silt Loam series (Environmental Design 2010). The topography is relatively flat, and impacts to these soils would be minor. The station would be constructed on 3 feet of fill.
Noise	Short-term construction-related noise would result during demolition of the existing station and construction of the new station. The proposed project would replace an existing facility, and is not expected to increase current noise level or frequency from responding to fire department emergency calls. The average number of calls—for the entire fire district— is once a week for aid/rescue and once a month for fire apparatus.
Land Use and Socioeconomics	The project area is primarily farmland and rural residential use. The new Station #1 would be constructed next to the existing station. Relocation of the fire station is not expected to result in socioeconomic impacts, other than the potential beneficial impact of continuing to provide fire protection services to the area.
Traffic	The proposed project, to replace an existing fire station, is not expected to result in an increase of traffic. Because the area is sparsely developed, and the fire station is unmanned and used only when there is a call for assistance (i.e., the fire station does not generate daily

	commute trips), changes in traffic from the status quo are not expected.
Vegetation	Station #1 would be constructed next to its current location in an area consisting of a variety of yard grass, and a community vegetable and flower garden. The garden would be relocated on the parcel. A mixed woodland forest along the eastern boundary of the grassy area. This area would not be disturbed. No trees would be removed for station construction or for the garden. The site of the existing Station #1 would be re-graded and paved to provide an access driveway to the new station. Areas exposed after demolition of the existing station that are not paved would be hydroseeded.
Visual Quality	Station #1 would be relocated next to its current location and would not appreciably change the visual quality of the area.
Water	Station #1 has been designed with a 100-foot buffer from the nearest stream which, as discussed under Section 4.4, Fish & Wildlife, is not mapped or documented as a fish bearing stream. The stream, which is less than 10 feet in width, runs northerly 100 feet east of the easternmost area of disturbance. It appears to have been manmade several years ago and to have water in it most of the year (Environmental Design 2010). Potential construction-related impacts to water such as from erosion and sedimentation would be minimized by use of best management practices (BMPs) including erosion control measures, stabilization of exposed areas within 24 hours of reaching grade, and hydroseed or plastic covering over all exposed areas immediately after construction. There would be a net increase of impervious surface (the footprint of the new building), but given the vegetated buffer between the project site and the stream, and the level topography of the site, would have little to no effect on the stream from stormwater runoff.

2.0 PURPOSE AND NEED

The purpose of the FEMA's Public Assistance (PA) grant program is to provide assistance to State, Tribal and local governments, and certain types of PNPs, to help communities quickly respond to and recover from major disasters or emergencies declared by the President. Through the PA Program, FEMA provides supplemental Federal disaster grant assistance for debris removal; emergency protective measures; and the repair, restoration, reconstruction, or replacement of disaster-damaged or destroyed infrastructure. The need for the FEMA action

described in this EA is to provide funds to Lewis County Fire District #13 (LCFD#13 or Fire District) to restore its fire services facility at a reduced risk from future flooding. The President declared a federal disaster for the region (FEMA-1734-DR-WA), making funds available to public entities for damage repairs.

During the declared December 2007 storm event, LCFD#13's Fire Station #1 was flooded when a debris jam at a bridge caused water from the South Fork of the Chehalis River to divert into areas not historically flooded by the river (see photo 1). The facility sustained such damage that the Lewis County Building Official condemned the structure.

Photo 1. Project Area following 2007 flooding

The LCFD#13 is an all volunteer department providing both fire and emergency medical technician (EMT) services to approximately 800 residents in the Boistfort Valley, an area of 102 square miles. The Fire District also provides support to neighboring fire districts when their capacity is exceeded. The department has 15 firefighters and 11 EMTs (5 of whom are both Firefighters/EMTs). In order to provide the prescribed coverage the Fire District has three strategically located stations with a total of eight vehicles.

Fire Station #1 received substantial structural damage from the December 2007 flood event. The station had makeshift repairs to allow continuing operation but the repairs were intended for the short-term, and conditions are currently less than optimum. The County has condemned the structure and will not allow it to be permanently repaired, so it must be replaced with a structure that meets current code (see Section 3.3 for additional detail).

2.1 PROJECT CRITERIA

The CEQ regulations require reasonable alternatives be identified, evaluated, and compared. Reasonable alternatives are alternative ways of meeting project objectives and criteria, but with varying degrees of environmental impact. Alternatives that would clearly result in substantially greater environmental impact than the Preferred Alternative do not require further analysis. The following project criteria are identified by the LCFD#13:

1. Flood Hazard. The primary driver for a new site is to relocate the fire station outside and above the area that flooded.
2. Response Time. The Fire District requires locations for its fire stations that optimize (minimize) response times for its residents and businesses. Fire stations are located so that service is no more than 5 driving miles away in order to expedite emergency response. Beyond safety considerations, response times can be an important factor with insurance coverage for residences and businesses.
3. Site Constraints. A new site needs to be of sufficient size that it can easily accommodate the movements of Fire District vehicles and equipment, as well as provide parking for volunteers and visitors.
4. Volunteers. The Fire District is an all-volunteer department. Any new site should be conveniently located for volunteers traveling to the fire hall from a variety of locations throughout the Fire District service area.
5. Cost. Cost is an important consideration for a small all-volunteer organization such as LCFD#13.
6. Availability of Property. Property must be available.

3.0 ALTERNATIVES ANALYSIS

This section discusses the alternatives considered in this EA: (1) the No Action Alternative, (2) the Proposed Action (or Preferred Alternative) toward which FEMA would contribute funding, and (3) Other Alternatives Considered and Not Carried Forward in the analysis.

3.1 ALTERNATIVE 1 – NO ACTION

The No Action Alternative, required by the CEQ regulations to be included in the analysis, serves to provide a baseline of existing conditions and current impacts to resources in the project area, and is used to compare and contrast the impacts to resources of the other (action) alternatives. Under the No Action Alternative, FEMA would not provide funding to replace the damaged fire station.

The existing Station #1 is a three-bay facility housing a fire engine, water tender, and rescue truck. It also has a restroom, training room, commissioner's meeting room and records office. Station #1 was donated by the Weyerhaeuser Company to the Fire District. The station has had temporary makeshift repairs and is still being used to house vehicles and equipment, and for administrative and meeting space. However, the County has issued notices stating that the building must be vacated soon.

Under the No Action Alternative, the LCFD#13 would continue to operate out of the condemned station until such time as funds became available to construct a new station. If other funding did not become available, and the Fire District was not able to continue to operate from the existing facilities (because the County has indicated that Fire District would have to vacate), it would continue to operate until such funding would become available, or another flood further damaged the structure. For these reasons, the No Action Alternative does not restore the Fire District's fire and emergency medical services to its pre-disaster capacity and does not meet the project criteria discussed in Section 2.1.

3.2 ALTERNATIVE 2 – PROPOSED ACTION (THE PREFERRED ALTERNATIVE)

Station #1 (Main Station)

The Proposed Action includes demolishing existing Station #1 and constructing the new station approximately 50 feet to the east (see Figure 2). The new location is currently a garden and lawn area. Approximately 440 cubic yards of fill would be required to increase the elevation of the new station by 3 feet in order to comply with the County's code for critical facilities. (The new location is already 2 feet above the current station due to topography, so there would be a total of 5 feet of elevation above the existing station.) The site of the existing station would be graded and paved to provide driveway access and egress off Boistfort Road to the new station (see Figure 3).

The new station would be a 3,968 square-foot, with 624 square-foot mezzanine, four-bay facility housing a fire engine, water tender, rescue truck and aid vehicle. It would also have a restroom, shower, training room, laundry, office, records room, and storage area.

The existing parking lot would remain, and the new paved area for the driveway and apron in front of the new fire station would total approximately 5,200 square feet. A septic tank and drainfield would be installed between the area south of the new station and Kahout Road. The septic system has not yet been designed but would generally be located in the area shown on Figure 3.

The staging and laydown area for vehicles, equipment and materials would utilize the existing parking area. Demolition of the building and disposal of the resulting waste would be required by contract specifications and in accordance with applicable air quality and waste management regulations (see Section 4.1).

The current location of Station #1 has regional significance for serving the public as an emergency evacuation center during a possible disaster. Station #1 is co-located with the Baw Faw Grange Hall, with a large paved parking lot, and the Boistfort School and gymnasium are next door. This arrangement offers the following advantages, which are of critical interest to Lewis County officials, the local community, and emergency management agencies from a regional perspective:

1. Station #1 is located next to the Baw Faw Grange, and both facilities have been used in the past for emergency food and shelter during flood events. The Baw Faw Grange houses the Emergency Command Center.
2. The Boistfort School and gymnasium can provide additional food, showers, and shelter during emergencies.
3. The parking lot next to Station #1 and the Baw Faw Grange, as well as the school ball fields, provide landing space for rescue helicopters.
4. Station #1's location is within 15 minutes of a medical facility, and within 1.5 hour's drive to Portland and Seattle via Interstate 5.

CONSTRUCTION SCHEDULE

Construction is expected to start in summer. A preliminary construction schedule includes the following general tasks:

Task	**Station #1, days**
Mobilization	2
Install sediment and erosion control	1
Clear and grub	2
Demolition	5
Construction	160
Revegetation	1
Final inspection	1
Site clean-up	1
De-mobilization	1
TOTAL	174*

*Weather permitting

Permits identified at this time that might be required for construction include Lewis County building permits, an NPDES (National Pollutant Discharge Elimination System) General Construction stormwater permit from the Washington State Department of Ecology (Ecology) (for disturbance of 1 acre or greater), and a Demolition Notification to the Southwest Clean Air Agency (SWCAA).

MITIGATION

Prior to and during construction, sediment and erosion control measures and best management practices will be installed on and around the project site to minimize adverse impacts, in accordance with the stormwater permit. Bare earth will be re-seeded and hayed to reduce potential sedimentation in stormwater run-off, and the silt fence will remain in place until the vegetation is re-established.

As described under the Proposed Action, the project includes demolishing the existing Station #1 and reconstructing it next to its current location. The project is designed to meet all local, state and federal requirements for water quality, critical areas, resource protection, and habitat conservation so the project results in no net loss of critical area functions and values.

The following mitigation measures would be employed and are included as part of the Proposed Action (additional mitigation measures might be identified as conditions of permits and approvals by agencies with jurisdiction):

Resource	Mitigation
General	Construction and clearing limits would be clearly marked on the ground and will not extend beyond the minimum area required to complete the work. Sensitive areas (e.g. the critical area buffer) would be flagged to delineate no-work zones. No machinery or equipment would access areas outside the construction limits. All mitigation measures would be clearly stated in the construction specifications.
Vegetation	Vegetation beyond the clearing zone would not be removed or damaged.
Water Quality and Soils	Construction activities would be planned to take place during the summer construction season. All disturbed ground would be reclaimed using appropriate best management practices. The measures described below would be maintained until the grade is stable and vegetation is re-established to prevent sediment from reaching the unnamed creek next to the Station #1 parcel. Sediment and erosion control would be implemented to prevent or reduce non-point source pollution and minimize soil loss and sedimentation in drainage areas. These practices might include, but would not be limited to, silt fence, filter fabric, check dams, straw wattles, and seeding/mulching of exposed areas. Regular site inspections would be conducted to ensure

	erosion control measures are properly installed and functioning effectively. A project-specific spill prevention, control, and countermeasures plan (SPCC) would be required prior to the start of construction. Equipment, materials and procedures necessary to prevent and respond to hazardous spills would be maintained on-site at all times.

3.3 OTHER ALTERNATIVES CONSIDERED AND NOT CARRIED FORWARD

Other alternatives were considered but dismissed from further evaluation because they did not meet the project criteria discussed in Section 2.1, above.

Repair of the Fire Station

The existing main station, although not located in a mapped floodplain, was flooded up to 28 inches in depth and experienced substantial damage as a result. The flood waters lifted the concrete pad under the building, which damaged the structure, interior, and contents. The structure would continue to be subject to flooding. In addition, repair of the existing structure would not meet the County's requirement that the structure, defined as a "critical facility," be elevated 3 feet above the high water mark.

Lewis County Code 15.35.300, Critical Facilities, states:

> Critical facilities should be afforded additional flood protection due to their nature. Construction of new critical facilities shall be located outside the limits of the 100-year floodplain as identified on the community's FIRM [flood insurance rate map], or as identified by Lewis County as being an area of high flood risk whether or not the location is identified on the FIRM, unless no alternative location is feasible. Substantial modification of existing critical facilities shall include an analysis of whether relocation is feasible. Construction of new critical facilities permitted within the 100-year frequency floodplain shall have the lowest floor elevated to three or more feet above the level of the 100-year frequency flood. [Ord. 1204 Exh. A § 5, 2008; Ord. 1157, 1998; Ord. 1145 § 7(B)(5), 1995]

Replacement of the Fire Station in the Same Location

This alternative involves demolition of the existing structure and its replacement including elevation of the structure as required by County Code.

The main station building would need to be elevated a minimum of 3 feet above the level of flooding, which would require fill to be added for a depth of approximately 5 feet. The required pad area (including side slopes) to elevate the structure 5 feet would require a larger construction footprint than the existing station, and result in slopes of approximately 6%, which would be too steep for fire district vehicles to egress and ingress the station within the confines of the site (Pers. Comm. F. Chapman, 10-25-11).

New Sites

The Fire District initiated discussions with landowners regarding the availability of land in the valley. The requirement to elevate or relocate a new fire station outside the area that flooded effectively limited the number of possible new locations. Relocating the fire station to the west of the Chehalis River would reduce existing levels of service.

The Fire District evaluated land near the intersection of Boistfort Road and PeEll McDonald Road; however this location was dropped from consideration because of lack of interest of the property owners.

4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section discusses the existing condition of affected resources and the potential effects of the No Action and Proposed Action alternatives.

4.1 HAZARDOUS MATERIALS AND TOXIC WASTES

Because of the age of the existing fire station (likely built between 1938 and 1942; see Schultze et al. 2012), lead-based paint (LBP) and asbestos containing material (ACM) may be present in the structures. Lead-based paint (LBP) was widely used until 1978. No other hazardous or toxic materials or equipment (e.g. underground storage tanks) were identified as present on the existing fire station site.

The proposed site for the new fire station is a community garden, and no hazardous materials are believed to be present.

ENVIRONMENTAL CONSEQUENCES

Alternative 1 – No Action

Under the No Action Alternative, there would be no new construction or demolition activities at this time. The existing fire station would continue to deteriorate. Continued deterioration would have the potential to release ACM or other toxic construction materials to the environment, or at the least, remain a nuisance and possible safety hazard.

Alternative 2 – Proposed Action

Construction of the new fire station would not be expected to result in hazardous materials or toxic waste-related impacts. The new fire station would be constructed in compliance with applicable Lewis County building codes and standards relating to building materials.

Demolition of the existing fire station would generate solid waste. Most of this waste would be chemically inert, but some might be hazardous or toxic. ACM and LBP waste, for example, might be present in the structure. Also, the structure might contain mercury-containing fluorescent lamps, polychlorinated biphenyl (PCB) ballasts, leaded pipes, miscellaneous household hazardous wastes (cleaners, solvents, paints, etc.), and white goods such as refrigerators, all of which will require proper management and disposal.

All demolition waste would need to be characterized to determine whether any of the waste is a dangerous waste, in accordance with the Washington State Department of Ecology's (Ecology's) regulations (WAC 173-303). This characterization might involve chemical testing and analysis. As a result of this characterization, wastes might need to be segregated into separate waste streams. These wastes would then need to be managed (handled, transported, and disposed of), based on whether they are solid or dangerous wastes.

ACM is a highly regulated waste stream. It is frequently present in older structures in a variety of forms, including cement pipes, wallboard, siding, asphalt and vinyl floor tiling, construction mastics, and duct insulation. Implementation of the federal Clean Air Act regulations regarding ACM is frequently delegated to either the State or to a local clean air agency, as is the case in Washington State. The SCAA regulations require notification of the intent to demolish structures. Before demolition, the structure would have to be inspected by an inspector certified under the Asbestos Hazard Emergency Response Act (AHERA). If ACM were present, a certified entity would have to remove and dispose of it, in accordance with SCAA, local health, and Ecology requirements. The demolition schedule and sequencing would be modified as appropriate to incorporate removal.

Ecology has technical guidance on demolition waste characterization, handling, and disposal at its website (Washington State Department of Ecology 2012). All reference material from the Southwest Clean Air Agency (SWCAA) regarding ACM is available at its website (SWCAA 2012).

4.2 FLOODPLAINS (EO 11988) AND WETLANDS (EO 11990)

Executive Order 11988 (Floodplain Management) requires federal agencies to reduce the risk of flood loss, minimize the impact on human health, safety, and welfare, and restore the natural and beneficial values served by floodplains. Under FEMA's implementing regulations at 44 CFR Part 9, FEMA must evaluate the potential effects of any actions it may take in a floodplain and consider alternatives to avoid adverse effects.

Similarly, EO 11990 (Protection of Wetlands) requires that federal agencies take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial effects of wetlands. Federal agencies, in planning their actions, are

required to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided.

Federal agencies are also required under 44 CFR Part 9 to provide public notice and review of plans for actions in floodplains and wetlands. The public notice for this disaster and public review of the Draft EA meet FEMA's public notice and review requirements.

Floodplains

Station #1 (both existing and proposed) is located on Flood Insurance Rate Map (FIRM) Panel #5301020430B, dated December 15, 1981, but the existing and proposed Station #1location is in areas mapped as Zone C, which is not in a 100-year or 500-year floodplain and has low flood hazard potential. The Station is situation near the confluence of the South Fork of the Chehalis River and an unnamed creek in a region of gently rolling prairie and mixed stands of woodland.

Although the site is outside a mapped floodplain, for purposes of environmental impact analysis, FEMA assumes the project area is subject to flooding because it was affected by a flood event in the past. Also, the Lewis County Code requires the fire station to be elevated above the area that flooded, or relocated to a site outside the area that flooded.

When the existing fire station building was originally set into place in the 1960s, the ground surface was excavated so that the floor was below grade, which contributed to the extent of flooding. Thus, if Station #1 is not rebuilt at a higher elevation, the flooding potential would continue, and the Lewis County code's elevation requirement would not be met.

Wetlands

Based on the National Wetlands Inventory and field observations, the No Action and Proposed Action alternatives would not take place in or affect wetlands.

ENVIRONMENTAL CONSEQUENCES

Alternative 1 – No Action

Under this alternative, there would be no new construction. Operations would continue until such time as the Fire District would no longer be allowed to operate from condemned structures. The existing structures would be subject to future flood events. Consequently, under the No Action alternative, there would be the potential for both structural and operational flood-related impacts such as additional damage to the structure, the ability of the Fire District to provide EMT and fire protection services, and on the surrounding area if flooding were to create structural debris.

Alternative 2 –Proposed Action

The location of the fire station under the Proposed Action is not in a mapped floodplain and no impacts on the floodplain or from flooding are anticipated at the new site. The proposed project would result in short term construction-related impacts. Short-term construction related impacts, such as water quality impacts to the adjacent floodplain, would be avoided and/or minimized with construction BMPs. With relocation of the fire station at 2 feet above current elevation, and the addition of 3 feet of fill to further raise Station #1, the potential for future flooding of the structures would be minimized. Additionally, the new location would not promote further occupancy or modification to the floodplain because the action is to replace an existing fire station essentially in the same general location, thus providing optimum fire services for the community.

4.3 CULTURAL, ARCHAEOLOGICAL, AND HISTORIC RESOURCES

The project area is located in the Chehalis River Valley. Human occupation of the Chehalis River valley began during the Clovis period, circa 11,000 years before present (BP). The earliest evidence for human occupation in the project vicinity consists of several fluted projectile points found near the city of Chehalis (Meltzer et al.1987; Osborne 1956).

The late Holocene (circa 4000 BP) saw a shift toward increasingly sedentary lifeways and more intensive exploitation of local resources. Fish, marine and plant products become more prominent in the diet, coinciding with investment in food preservation and storage systems (Herbel and Schalk 2002). This lifeway continued and intensified into the Late Prehistoric or Late Pacific periods (circa 2200–200 BP).

Population levels in the Lewis County region appear to have increased during the Late Period, and lifeways documented in early historical accounts appear to have been established. Toward the end of this period and the advent of the historic era, Native American communities throughout the area began to be dramatically affected by the arrival of Euro-American populations. Although direct contact did not always occur during the early years of the nineteenth century, indirect impacts, in the form of spreading epidemics, had significant effects on these Native peoples (Boyd 1998; Campbell 1989).

In the early nineteenth century, Native American groups of the Southwestern Coast Salish tradition occupied the Chehalis River Valley (Hajda 1990). They were politically organized at the village level, but recognized larger group associations based on dialect and cultural similarity. The proposed project is located in an area of joint occupation by the Upper Chehalis and Cowlitz groups.

Euro-American settlers began to move into the area around Boistfort in the 1850s. They were primarily farmers and loggers. Hops became a major crop grown in the area from the 1860s up until Prohibition. The area still remains rural.

ENVIRONMENTAL CONSEQUENCES

Alternative 1 – No Action

Under the No Action Alternative, the project would not be funded by FEMA, and there would be no effects to historic properties or archaeological resources.

Alternative 2 –Proposed Action

As a federal agency, FEMA is required under Section 106 of the National Historic Preservation Act (NHPA) to consider the effects of its undertakings on "historic properties" (those on, or eligible for, the National Register of Historic Places [NRHP]).

Under Section 106, FEMA must define the geographic Area of Potential Effects (APE) to cultural, archaeological, or historic resources. Two APEs were designated for the Main Station project. The archaeological APE is located directly east of the existing Main Fire Station, and consists of the footprint of the building and a surrounding area that might be affected by construction activities. The architectural APE extends one tax parcel beyond the site proposed for the new fire station in order to consider potential visual impacts on any historic structures in the area.

Architectural considerations. Within the architectural APE are the existing fire station (constructed between 1938 and 1942), a general-purpose shed (constructed in 1912), the Boistfort elementary school (constructed in 1936), and the Baw Faw Grange Hall (constructed in 1939 or 1940). FEMA contractor Historical Research Associates (HRA) conducted an architectural inventory and determined that the elementary school and the grange hall may be eligible for the NRHP. FEMA determined that there would be No Adverse Effect on these properties due to the long-standing presence of a fire station in the area and the limited visibility of the fire station from the buildings' vantage points.

Archaeological considerations. HRA conducted background research and field work for the project and found one multicomponent (prehistoric and historic) archaeological site (45LE856) within the archaeological APE, directly east of the current station. Based on these results, a second, more extensive investigation was conducted of the project area to evaluate the site and its eligibility for the NRHP.

Though a diffuse scatter of prehistoric and historic artifacts was found during this second investigation, none of the criteria that would make them eligible for listing on the NRHP was met, nor did the site maintain integrity (a measure of how well a cultural resource conveys significance). Therefore FEMA made a determination of No Adverse Effect on Site 45LE856 under Section 106 and received concurrence with this determination from the State Historic Preservation Officer (SHPO) at the Washington State Department of Archaeology and Historic Preservation (DAHP) (Appendix C). The Chehalis Tribe and the Cowlitz Indian Tribe have also

been consulted under Section 106. The Tribes were notified of the results of the first investigation and were invited to be present at the second archaeological investigation. A Chehalis tribal representative was on site during the week of the investigation to observe the work. The results of the investigation were also provided to the Tribes. No comments were received.

4.4 FISH AND WILDLIFE

The project is located in a rural area, but the proposed site location contains structures, roads, and asphalt pavement, which provide little habitat for fish, wildlife, and birds. A grass lawn and a garden are also present on site. There may be some low-quality habitat (birds and insects) associated with these areas.

A mixed woodland forest lies along the eastern boundary of the developed area and grass field and garden. This type of forest is typically habitat for a variety of wildlife common to lowland forests in western Washington, none of which are special status species.

At a distance of 100 feet from the eastern edge of the area to be disturbed, is a stream, identified as hydrologists as manmade in a Critical Area Report (Environmental Design 2010). The Report states that the stream appears to have habitat suitable for fish. The Washington State Department of Fish and Wildlife's (WDFW's) SalmonScape database, which maps salmon, steelhead, bull trout, and Dolly Varden trout, indicate none of these species are present. The Washington State Department of Natural Resources' (DNR's) Forest Practices Application Review System (FPARS) map shows a fish-bearing stream along Kahout Road, but the Report states that this stream is no longer present.

No federally listed fish, wildlife, bird, plant, or other species, or their critical habitat, under the Endangered Species Act, are found on the project site or in the forested area to the east.

Despite the man-made stream being unmapped, since the stream meets DNR criteria for a fish-bearing stream, the project was designed with a 100 foot buffer from the ordinary high water mark (OHWM) to avoid potential impacts to the stream.

ENVIRONMENTAL CONSEQUENCES

Alternative 1 – No Action

Under the No Action alternative, there would be no effect to fish and wildlife in the area.

Alternative 2 – Proposed Action

Under this alternative, the project might include minimal, short-term noise impacts to wildlife. Due to the distance from the stream, the relatively flat topography of the site, and the BMP measures that would be employed, no effects to the stream would be anticipated.

4.5 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE (EO 12898)

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority and low-income populations in the US resulting from federal programs, policies, and activities. Socioeconomic and demographic data for residents in Lewis County were studied to determine if a disproportionate number (defined as greater than 50 percent) of minority or low-income persons have the potential to be affected by the project alternatives.

U.S. Census Bureau 2010 data for Lewis County (US Census Bureau 2012) reports the County population as 75,455 people. Data indicate the following breakdown, based on race: 89.7% White, 0.5% Black, 1.4% American Indian and Alaska Native, 0.9% Asian, 8.7% Hispanic and 2.6% "Other" or a mix of two or more races.

Median incomes for households and families were $35,511 and $41,105, respectively. Approximately 10.4% of families and 14% of the population were below the poverty line, including 18.6% of those under age 18 and 9.4% of those individuals age 65 and over.

ENVIRONMENTAL CONSEQUENCES

Alternative 1 – No Action

The No Action alternative would result in reduced levels of fire protection and EMS service to all residents within the LCFD#13 service area, regardless of racial status or income level.

Alternative 2 –Proposed Action

The Proposed Action, to replace Station #1 would not result in disproportionately high and adverse human health or environmental effects on minority and low-income populations because of the small scale and limited nature of construction, temporary nature of impacts, and sparsely populated and rural nature of the project area.

The new fire station would benefit all residents within the Fire District service area, including minority and low-income residents. The relocation does not change the response times to any particular area within the service area. Therefore, no disproportionately high and adverse impacts on minority or low-income populations would occur.

4.6 PUBLIC HEALTH AND SAFETY

The LCFD #13 provides fire and EMS services to a resident population of approximately 800 people over a service area of approximately 102 square miles. The Fire District operates three fire stations. The existing fire stations have served the Boistfort Valley community since the 1960s.

ENVIRONMENTAL CONSEQUENCES

Alternative 1 – No Action

This alternative has several adverse impacts on public safety. First, the existing structure, while "…safe for temporary occupancy…," places Fire District staff at risk because of the weakened structural integrity of the building.

Second, inadequate facilities and equipment limit the capabilities of the Fire District to respond to fire and emergency medical calls. Response times could increase and the levels of service experienced by area residents and businesses could decline. Further, in the event of a major widespread disaster that results in severe damage, the Fire District could find itself unable to provide desired levels of service to area residents. In addition, other neighboring Fire Districts that depend on LCFD#13 to supplement their capabilities would not be able to receive assistance.

Finally, the No Action Alternative would not be in compliance with the County's requirement to elevate Fire Station #1 (Lewis County Code 1335).

Alternative 2 –Proposed Action

Under this alternative, the existing Station #1 would be demolished and replaced by a new fire station that would be built above grade and on 3 feet of fill. This alternative would meet the County's code.

This alternative would provide an improved working environment for Fire District personnel and would provide additional space for storage and maintenance of vehicles and equipment at Station #1, the main station. The capabilities of the Fire District would be enhanced by the space provided for potential use as an Emergency Operations Center (EOC) and/or emergency shelter.

Overall, the new site and structure would provide a safe operating environment for Fire District personnel and would enhance the capabilities of the fire District to serve its residents and support residents of neighboring fire districts. This would provide a beneficial impact to the service area.

5.0 CUMULATIVE IMPACTS AND PUBLIC INVOLVEMENT

CUMULATIVE IMPACTS

Cumulative effects or impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative effects are determined by combining the effects of an action with other past, present, and reasonably foreseeable future actions.

The contribution of noise and of dust from equipment and vehicle emissions during construction activities would not result in a measurable contribution to cumulative impacts on air quality to greenhouse gases, or to climate change.

Due to the limited scope of the work and the proposed mitigation (see description of the Proposed Action), the potential impacts from replacing the damaged fire station are not expected to contribute a measurable amount to cumulative effects. There are no non-federal activities or development planned for the area.

The primary intent of this project is to restore the fire protection and EMS services that existed prior to the flood event. Other than the beneficial effects to the community of rebuilding the fire station free from the potential for future flooding, no other cumulative impacts are likely.

PUBLIC INVOLVEMENT

FEMA is the lead federal agency for conducting the NEPA compliance process prior to deciding whether to fund the main station relocation project. As the lead agency, FEMA prepares NEPA documents, responds to any public comments, meets the spirit and intent of NEPA, and complies with all NEPA provisions.

The public was provided the opportunity to comment on the Draft EA for 14 days after the publication of the Public Notice. The Notice identified the action, location of the proposed site, participants, availability of the Draft EA, and who to write to, to provide comments. FEMA received no written comments. The Public Notice and Draft EA were also made available to the public by the Lewis County FD #13 in at least five locations in and around the community of Boistfort, and their availability was also published in the local paper (Urbas 2012).

Before the Draft EA comment process, Lewis County Fire District #13 provided opportunities for the involvement of its residents, businesses, and local government entities in the decision-making process through a number of outreach efforts and venues. Public meetings were held to

present initial designs, present progress, and receive input from the residents of the district. The first meeting was held at the Baw Faw Grange Hall. The Fire District advertised the meeting with a notice in the local newspaper (*The Daily Chronicle*) and on the reader board on Boistfort Road in front of Station #1 and the Grange Hall. Fire Chief Peterson; Architect Norm Pfaff; and Commissioners Fenn, Munroe, and Macnab presented the project status and station plans.

To gain additional community input, the project status and plans were presented a second time at the next local Lions Club meeting. Attendance and participation at both meetings was reported as having been very good.

Several meetings have been held with members of the Firefighters Association to gain their input on the project. The Fire District also had one-on-one reviews with residents who were not able to attend the public meetings or who wanted additional information.

The proposal was also discussed and reviewed with appropriate County and local agencies including the County Building Department officials, Community Development Department planners, Road Department, Environmental Health Department, Auditor's and Assessor's Offices, as well as the local Public Utility District (PUD) and Water District (LCFD#13 2011).

PROJECT CONDITIONS AND CONSERVATION MEASURES

These are found in Appendix A.

6.0 LIST OF PREPARERS

Mark Eberlein, FEMA, Region 10, Regional Environmental Officer
Diori Kreske, FEMA, Region 10, Environmental Specialist
Susan King, FEMA, Region 10, Environmental Specialist
Aaron Fogel, FEMA Archaeologist
Lynn Compas, Historical Research Associates, Inc.

AGENCIES AND PERSONS CONSULTED

Lewis County Fire District #13

Commissioners: Dave Fenn, Chairman; Bill Macnab
Gregg Peterson, Fire Chief

Lewis County

Fred Chapman, Building Official and Fire Marshal

Tribes

Richard Bellon, Confederated Tribes of the Chehalis
Dave Burlingame, Cowlitz Indian Tribe

Washington Department of Archaeology and Historic Preservation

Allyson Brooks, Ph.D, State Historic Preservation Officer
Robert Whitlam, State Archaeologist
Russell Holter, Preservation Design Reviewer

Washington Emergency Management Division

Gary Urbas, Deputy State Coordinating Officer

U.S. Department of Agriculture, Natural Resources Conservation Service

Charles Natsuhara, Area Resource Soil Scientist

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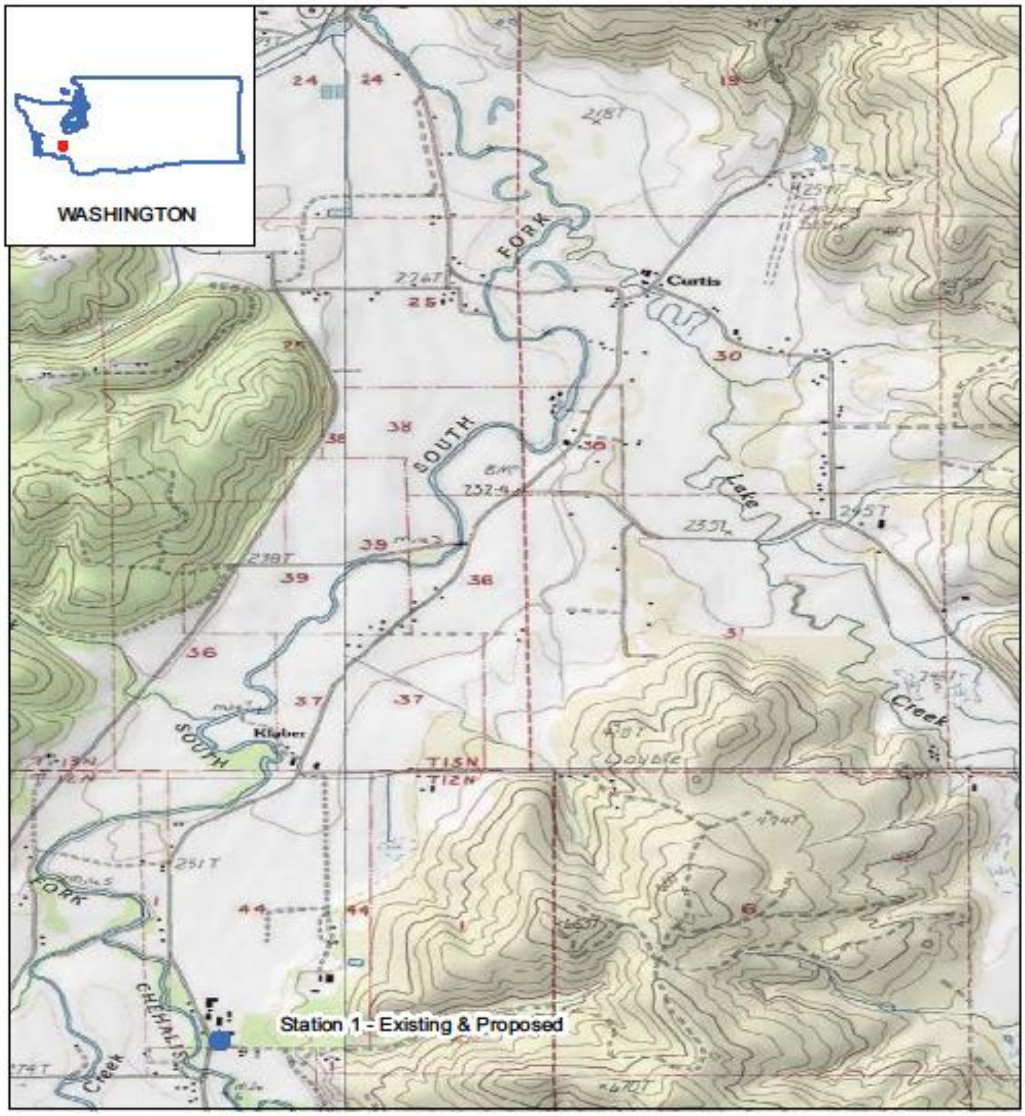
Figure 1. Project Vicinity Map
LCFD#13 Replacement of Fire Station #1



Public Assistance Section, Washington State Emergency Management Division
March 8, 2012

Figure 2. Station #1 – Existing and New Location

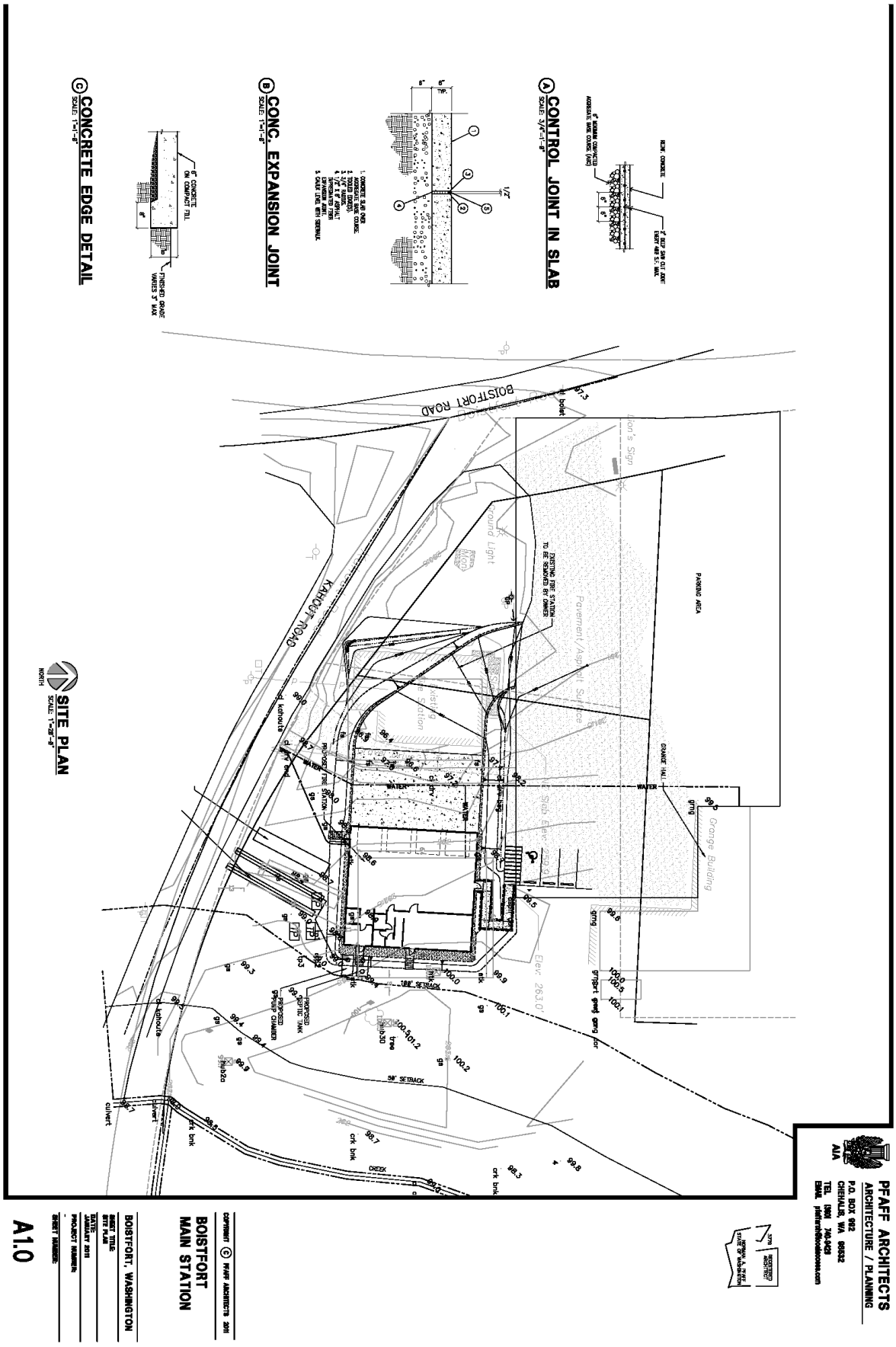


Figure 3 – Station #1 Site Plan

APPENDIX A

PROJECT CONDITIONS AND CONSERVATION MEASURES

The following conditions and measures shall be followed:

- The applicant shall obtain all required local, state, and federal permits and approvals prior to implementing the Proposed Action Alternative and comply with any and all conditions imposed.
- The applicant shall provide notification to the Southwest Clean Air Agency (SWCAA) regulations of the intent to demolish the original fire station, determine whether ACM is present, and if so, comply with all applicable requirements for removal and disposal.
- The applicant shall characterize, manage, and dispose of demolition wastes in accordance with Ecology regulations.
- The applicant is responsible for implementing, monitoring, and maintaining best management practices to control erosion and sediment, reduce spills and pollution, and provide habitat protection, including compliance with the conditions of the stormwater general construction permit.
- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other laws and Executive Orders.
- In the event that cultural, archaeological or historic materials are discovered during project activities, work in the immediate vicinity shall be discontinued, the area secured, and the State, Affected Tribes, and FEMA notified.

APPENDIX B

PUBLIC NOTICE

Federal Emergency Management Agency
Draft Environmental Assessment
Replacement of Fire Station #1 (Main Station)
Lewis County Fire District #13
Lewis County, WA

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to provide funds to Lewis County Fire District #13 (Fire District) to demolish and construct in its place Fire Station #1, damaged by flooding in December 2007 when a debris jam at a bridge diverted water from the South Fork Chehalis River into the project area. The facility sustained so much damage that the Lewis County Building Official condemned the structure.

FEMA prepared a Draft Environmental Assessment (EA) for the proposed project pursuant to the National Environmental Policy Act (NEPA) and FEMA's implementing regulations found in 44 Code of Federal Regulations (CFR) Part 10. The EA evaluates project alternatives and compliance with applicable environmental laws and Executive Orders 11988 (Floodplain Management), 11990 (Protection of Wetlands), and 12898 (Environmental Justice). The alternatives evaluated in the EA are the (1) No Action; and (2) Proposed Action (or Preferred) Alternatives toward which FEMA would contribute funding, and 3) Other Alternatives Considered but not carried forward in the analysis.

The proposed volunteer fire station location is:

> Station #1 (Main Station) – 997 Boistfort Road, Boistfort, WA; SW ¼ of Section 44, T12N, R4W, Willamette Meridian (Lat. 46.54866, Long. -123.13236).

The Draft EA is available for review online at the FEMA environmental website: http://www.fema.gov/plan/ehp/envdocuments/ea-region10/shtm.
Additionally, a hard copy is available for review at the Fire Station. Unless substantive comments are received, FEMA will not publish another notice for this project. If no substantive issues are identified during the comment period, FEMA will finalize the EA, issue a Finding of No Significant Impact (FONSI) and fund the project. The Final EA and FONSI will be available for viewing at the FEMA website noted above. Please submit your written comments on the Draft EA to FEMA Region 10 Acting Environmental Officer, Science Kilner, no later than 5 pm on July 5, 2012. Comments can be:

1. Mailed: 130 228th Street SW, Bothell, WA 98021
2. E-mailed: science.kilner@fema.dhs.gov
3. Faxed: 425-487-4613

APPENDIX C. SHPO AND TRIBAL CONSULTATION